(16)

No. 04-607

Supreme Court, U.S.
FILED
DEC 23 2005
OFFICE OF THE CLERK

In The

Supreme Court of the United States

LABORATORY CORPORATION OF AMERICA HOLDINGS (dba LabCorp),

Petitioner,

v.

METABOLITE LABORATORIES, INC. and COMPETITIVE TECHNOLOGIES, INC.,

Respondents.

On Writ Of Certiorari To The United States Court Of Appeals For The Federal Circuit

BRIEF OF THE PUBLIC PATENT FOUNDATION AS *AMICUS CURIAE* IN SUPPORT OF PETITIONER

DANIEL B. RAVICHER
Executive Director
PUBLIC PATENT FOUNDATION, INC.
1375 Broadway, Suite 600
New York, New York 10018
(212) 796-0570

PROFESSOR JUSTIN HUGHES
Counsel of Record
Benjamin N. Cardozo
School of Law
55 Fifth Avenue
New York, New York 10003
(212) 790-0200
Counsel for Amicus Curiae

December 23, 2005

COCKLE LAW BRIEF PRINTING CO. (800) 225-6964
OR CALL COLLECT (402) 342-2831

TABLE OF CONTENTS

Page

TABLE OF CONTENTS i

TABLE OF AUTHORITIES ii

INTEREST OF THE *AMICUS CURIAE* 1

SUMMARY OF ARGUMENT 2

I. THE COURT OF APPEALS FOR THE FEDERAL CIRCUIT HAS IMPERMISSIBLY VEERED FROM THIS COURT'S PRECEDENT REGARDING PATENTABLE SUBJECT MATTER 2

A. This Court's Precedent Sets Out Limits on Patentable Subject Matter 3

B. The Federal Circuit Has Strayed from This Court's Limits on Patentable Subject Matter 5

II. IN ORDER TO PROMOTE THE PATENT SYSTEM'S GOAL OF DISCLOSURE, A CLAIM THAT EFFECTIVELY COVERS ALL USES OF A LAW OF NATURE OR ABSTRACT IDEA SHOULD BE INELIGIBLE FOR PATENT PROTECTION 10

III. PATENT CLAIM CONSTRUCTIONS THAT RESTRICT COMMUNICATION REGARDING ABSTRACT IDEAS OR LAWS OF NATURE ARE CONTRARY TO THE FIRST AMENDMENT 17

CONCLUSION 19

TABLE OF AUTHORITIES

Page

CASES

Arrhythmia Research Tech., Inc. v. Corazonix Corp., 958 F.2d 1053 (1992) 5, 6

AT&T Corp. v. Excel Communications, Inc., 172 F.3d 1352 (Fed. Cir. 1999) 8

Baker v. Selden, 101 U.S. 99 (1879) 11, 13, 14

Chaplinsky v. New Hampshire, 315 U.S. 568 (1942) 17

Diamond v. Chakrabarty, 447 U.S. 303 (1980) 3, 7, 8

Diamond v. Diehr, 450 U.S. 175 (1981) ..... *passim*

Eldred v. Ashcroft, 537 U.S. 186 (2003) 18

Feist Publications, Inc. v. Rural Telephone Service, 499 U.S. 340 (1991) 11, 12

Fox Film Corp. v. Doyal, 286 U.S. 123 (1932) 14

Funk Bros. Seed Co. v. Kalo Co., 333 U.S. 127 (1948) 3, 5, 8

Gottschalk v. Benson, 409 U.S. 63 (1972) ..... *passim*

Harper & Row, Publishers, Inc. v. Nation Enterprises, 471 U.S. 539 (1985) 11, 18

Herbert Rosenthal Jewelry Corp. v. Kalpakian, 448 F.2d 738 (9th Cir. 1971) 14, 15

In re Alappat, 33 F.3d 1526 (Fed. Cir. 1994) 6, 7, 8, 12

J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc., 534 U.S. 124 (2001) 2

Kern River Gas Transmission Co. v. Coastal Corp., 899 F.2d 1458 (5th Cir.), *cert. denied*, 498 U.S. 952 (1990) 13

TABLE OF AUTHORITIES – Continued

Page

Le Roy v. Tatham, 55 U.S. (14 How.) 156 (1853) 5

Mackay Radio & Tel. Co. v. Radio Corp. of America, 306 U.S. 86 (1939) 12

Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996) 10

MGM Studios Inc. v. Grokster, Ltd., 125 S. Ct. 2764 (2005) 15

Miller v. California, 413 U.S. 15 (1973) 17

Morrissey v. Proctor & Gamble Co., 379 F.2d 675 (1st Cir. 1967) 13, 15

O'Reilly v. Morse, 56 U.S. (15 How.) 62 (1854) 3

Parker v. Flook, 437 U.S. 584 (1978) ..... *passim*

Rubber Tip Pencil Company v. Howard, 87 U.S. 498 (1874) 12

Sinclair & Carroll Co. v. Interchemical Corp., 325 U.S. 327 (1945) 10

Sony v. Universal City Studios, 464 U.S. 417 (1984) 14, 15

State St. Bank & Trust Co. v. Signature Fin. Group, 149 F.3d 1368 (Fed. Cir. 1998) 8

Universal City Studios, Inc. v. Corley, 273 F.2d 429 (2nd Cir. 2001) 18

Universal Oil Products Co. v. Globe Oil & Refining Co., 322 U.S. 471 (1944) 10

Veeck v. Southern Bldg. Code Cong. Int'l Inc., 293 F.3d 791 (5th Cir. 2002) (*en banc*), *cert. denied*, 539 U.S. 969 (2003) 12

TABLE OF AUTHORITIES – Continued

Page

STATUTES

17 U.S.C. § 102(b) 12

OTHER AUTHORITIES

D. Chisum, *The Patentability of Algorithms*, 47 U. Pitt. L. Rev. 959 (1986) 6

Eileen M. Kane, *Splitting the Gene: DNA Patents and the Genetic Code*, 71 Tenn. L. Rev. 707 (2004) 15

Folic Acid Deficiency, eMedicine Website 17

Justin Hughes, *The Philosophy of Intellectual Property*, 77 Geo. L. J. 287 (1988) 11

Katherine Strandburg, *What Does the Public Get?: Experimental Use and the Patent Bargain*, 2004 Wisc. L. Rev. 81 (2004) 11

Kenneth W. Dam, *The Economic Underpinnings of Patent Law*, 23 J. Legal Stud. 247 (1994) 5

Melville B. Nimmer & David Nimmer, NIMMER ON COPYRIGHT (2005) 12

National Institutes of Health, Office of Dietary Supplements Website 17

R.L. Gable & J.B. Leaheey, *The Strength of Patent Protection for Computer Products*, 17 Rutgers Computer & Tech. L.J. 87 (1991) 6

Rebecca Eisenberg, *Patents and the Progress of Science*, 56 U. CHI L. REV. 1017 (1989) 10

INTEREST OF THE *AMICUS CURIAE*[1]

The Public Patent Foundation ("PUBPAT") is a not-for-profit legal services organization founded in 2003 to represent the public interest in the patent system, and most particularly the public's interests against the harms caused by wrongly issued patents and unsound patent policy. PUBPAT provides the general public and specific persons or entities otherwise deprived of access to the patent system with representation, advocacy, and education. It is funded by grants from the Rockefeller Foundation, the Echoing Green Foundation, the Rudolph Steiner Foundation and the Open Society Institute as well as donations from private individuals.

PUBPAT believes that the patent system can be improved through use of the patent system's existing legal structures. For example, the USPTO has consistently granted PUBPAT's requests for agency reexamination of particular patents that PUBPAT believes were wrongly issued. PUBPAT has also advocated for sound patent policy before this Court, the United States Court of Appeals for the Federal Circuit, the United States Patent & Trademark Office, the European Parliament, and the United States House of Representatives Subcommittee on Courts, the Internet, and Intellectual Property.

PUBPAT has an interest in this matter because the decision of this Court will have a significant effect on the

---

[1] Pursuant to Supreme Court Rule 37.6, *amicus* states that no counsel for a party authored this brief in whole or in part, and that no person or entity, other than *amicus curiae* and its counsel made a monetary contribution to the preparation or submission of this brief. Written consent of the parties was obtained and will be filed with the Clerk of the Court in accordance with Supreme Court Rule 37.3.

public interest represented by PUBPAT. More specifically, PUBPAT has an interest in ensuring that this Court's established limits on patentable subject matter are maintained.

SUMMARY OF ARGUMENT

Almost twenty-five years have passed since this Court last addressed the core issues of patentable subject matter. In that time, the Court of Appeals for the Federal Circuit has replaced this Court's substantive standard with a more formalistic approach that has expanded the definition of patentable subject matter to include virtually anything. This expansion by the Federal Circuit conflicts with this Court's precedent and, as such, merits remediation.

In addition, there are two other issues that should be considered when addressing patentable subject matter. First, allowing claims that effectively cover all uses of a law of nature or abstract idea frustrates the patent system's goal of disclosure. Second, patent claims that restrict communication regarding abstract ideas or laws of nature are contrary to the First Amendment.

I. THE COURT OF APPEALS FOR THE FEDERAL CIRCUIT HAS IMPERMISSIBLY VEERED FROM THIS COURT'S PRECEDENT REGARDING PATENTABLE SUBJECT MATTER.

Almost twenty-five years have passed since this Court last addressed the core issues of patentable subject matter. *Cf. J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc.*, 534 U.S. 124 (2001) (addressing whether utility patents

may be issued for plants). In that time, the Court of Appeals for the Federal Circuit has replaced this Court's substantive standard with a more formalistic approach that has expanded the definition of patentable subject matter to include virtually anything. This expansion by the Federal Circuit is judicially erroneous and merits remediation.

A. This Court's Precedent Sets Out Limits on Patentable Subject Matter.

Confronted with the rise of new technologies, this Court has addressed the issue of patentable subject matter several times. *Gottschalk v. Benson*, 409 U.S. 63 (1972); *Parker v. Flook*, 437 U.S. 584 (1978); *Diamond v. Chakrabarty*, 447 U.S. 303 (1980); *Diamond v. Diehr*, 450 U.S. 175 (1981). Since before the Civil War, this Court has consistently made it clear that subject matter which would have the practical effect of preempting a law of nature, mathematical formula, or abstract idea is ineligible for patent protection. *O'Reilly v. Morse*, 56 U.S. (15 How.) 62, 113 (1854); *Benson*, 409 U.S. at 71. This age-old and time-tested precedent effectively establishes a penumbra of ineligibility for patent protection to safeguard the fundamental policy that laws of nature and abstract ideas be left unrestrained by patents.

To be eligible for patent protection, "[a] process itself, not merely the mathematical algorithm, must be new and useful." *Flook*, 437 U.S. at 591; *Funk Bros. Seed Co. v. Kalo Co.*, 333 U.S. 127, 130 (1948) ("He who discovers a hitherto unknown phenomenon of nature has no claim to a monopoly of it which the law recognizes. If there is to be invention from such a discovery, it must come from the

application of the law of nature to a new and useful end."). This Court stated in *Flook* that it is "incorrect [to] assume[] that if a process application implements a principle in some specific fashion, it automatically falls within the patentable subject matter of § 101." *Id.* at 593. This Court explained that such an assumption is based on an impermissibly narrow interpretation of its precedent, including specifically *Benson,* and is "untenable" because "[i]t would make the determination of patentable subject matter depend simply on the draftsman's art and would ill serve the principles underlying the prohibition against patents for 'ideas' or phenomena of nature." *Id.*

In alignment with *Benson* and *Flook*, this Court's decision in *Diehr* held that structures or processes must, when considered as a whole, perform functions intended to be covered by patent law in order to be eligible for patent protection. 450 U.S. at 192. Although *Diehr* may have effectively overruled *Flook's* "point of novelty" test, it nonetheless followed and upheld the core holdings of both *Benson* and *Flook*. *Id.* at 190, 191-193 (*citing Benson* and *Flook* repeatedly and *stating* "[o]ur reasoning in *Flook* is in no way inconsistent with our reasoning here").

Benson, *Flook*, *Diehr* and the other decisions of this Court regarding patentable subject matter consistently established that the inquiry into whether subject matter is eligible for patenting is one of substance and function, not form. This Court requires that one look, not simply at the language of the patent claim to see if it recites a structure of multiple steps or components, but also at the practical effect of the claim to see if it in fact covers – or otherwise would restrict the public's use of – a principle, law of nature, abstract idea, mathematical formula, mental process or other abstract intellectual concept.

This substantive standard ensures that skilled patent draftsmanship is not capable of overcoming one of the most core principles of patent law recognized by this Court for more than 150 years that "[a] principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right." *Le Roy v. Tatham*, 55 U.S. (14 How.) 156, 175 (1853); *Funk Bros.*, 333 U.S. at 130; *Benson*, 409 U.S. at 67 ("[p]henomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work").

B. The Federal Circuit Has Strayed from This Court's Limits on Patentable Subject Matter.

Many scholars have noted that the creation of the Federal Circuit "did away as a practical matter with Supreme Court jurisdiction in patent cases." Kenneth W. Dam, *The Economic Underpinnings of Patent Law*, 23 J. Legal Stud. 247, 270 (1994). For example, through a series of decisions, the Federal Circuit has abandoned the substantive based standard established by this Court for determining patentable subject matter and replaced it with a more expansive formalistic approach that looks only to see whether a patent claim contains some structure or has some minimal practical utility. The Federal Circuit's form-over-substance approach has come to include virtually anything within patentable subject matter.

Initially, the Federal Circuit used the opinions of legal commentators to justify straying from *Benson* and *Flook*. *Arrhythmia Research Tech., Inc. v. Corazonix Corp.*, 958

F.2d 1053, 1057 n.4 (1992) ("Although commentators have differed in their interpretations of *Benson, Flook,* and *Diehr,* it appears to be *generally agreed* that these decisions represent *evolving views* of the Court, and that the reasoning in *Diehr* not only elaborated on, but in part superseded, that of *Benson* and *Flook*") (emphasis added) (*citing* R.L. Gable & J.B. Leaheey, *The Strength of Patent Protection for Computer Products,* 17 Rutgers Computer & Tech. L.J. 87 (1991); D. Chisum, *The Patentability of Algorithms*, 47 U. Pitt. L. Rev. 959 (1986)). Evidently, the Federal Circuit felt that "general agreement" amongst legal commentators justified abandoning this Court's precedent. In reaching this conclusion, the Federal Circuit also ignored the *Diehr* Court's statement that its decision there was in accord with *Benson* and *Flook*. *Diehr*, 450 U.S. at 185-193.

Also in *Arrhythmia*, the Federal Circuit stated that, "claims to a specific process or apparatus . . . will *generally satisfy* section 101." *Id.* at 1058 (emphasis added). This Court's precedent does not – in fact – support the proposition that any process or apparatus "generally satisfies" the requirements of patentable subject matter. *Diehr*, 450 U.S. at 193 ("[a] mathematical formula as such is not accorded the protection of our patent laws . . . and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment") (citing *Benson* and *Flook*). The new "general rule" promulgated in *Arrhythmia* was a major step in the Federal Circuit's departure from this Court's precedent regarding patentable subject matter.

Roughly two years later, the Federal Circuit said that this Court's precedent on patentable subject matter was too unclear to follow. *In re Alappat*, 33 F.3d 1526, 1543

n.19 and n.20 (Fed. Cir. 1994) ("The Supreme Court has not been clear", "The Supreme Court has not set forth, however, any consistent or clear explanation", "the understandable struggle that the [Supreme] Court was having in articulating a rule"). Contrary to the Federal Circuit's characterizations, however, this Court's precedent on patentable subject matter is plainly clear: the analysis is one of substance, not form, and asks whether a patent claim effectively preempts a law of nature, natural phenomenon or abstract idea.

After disregarding this Court's precedent as "unclear," the Federal Circuit substituted its own formalistic approach, which finds that virtually anything is eligible for patenting. *Id.* at 1542 ("[t]he use of the expansive term 'any' in § 101 represents Congress's intent not to place any restrictions on the subject matter for which a patent may be obtained"). The Federal Circuit's approach conflicts with this Court's precedent. For example, it ignores the firm statement in *Diehr* that "[a] mathematical formula does not suddenly become patentable subject matter simply by having the applicant acquiesce to limiting the reach of the patent for the formula to a particular technological use." 450 U.S. at 193.

In support of its holding, the Federal Circuit cited this Court's *Chakrabarty* decision for the proposition that, "Congress intended § 101 to extend to 'anything under the sun that is made by man.'" *Id.* (citing *Chakrabarty*, 447 U.S. 303, 309). However, the Federal Circuit then went much farther than *Chakrabarty's* holding by saying, "Thus, it is improper to read into § 101 limitations as to the subject matter that may be patented where the legislative history does not indicate that Congress clearly intended such limitations." *Id.* But such was precisely *not*

this Court's holding in *Chakrabarty*. Immediately following the language in *Chakrabarty* quoted by the Federal Circuit, this Court continued to say that, "[t]his is *not* to suggest that § 101 has *no* limits or that it embraces every discovery." 447 U.S. at 309 (emphasis added). In support of that statement, this Court referred to *Flook*, *Benson*, *Funk Bros.* and other cases, and not to any legislative history. Thus, this Court's precedent clearly shows that there are indeed limits on patentable subject matter beyond those expressly stated by Congress. The Federal Circuit's ruling to the contrary was error.

Indeed, *Alappat* was a highly divided *en banc* decision, wherein several members of the Federal Circuit recognized the judicial error being made. *Id.* at 1552, 1562 (Archer, C.J., *dissenting* "Losing sight of the forest for the structure of the trees, the majority today holds that any claim reciting a precise arrangement of structure satisfies 35 U.S.C. § 101. . . . [T]he rationale that leads to this conclusion and the majority's holding that Alappat's rasterizer represents the invention of a machine are illogical, inconsistent with precedent and with sound principles of patent law, and will have untold consequences", "the majority's test under § 101 that looks simply to whether specific structure is claimed is [] inconsistent with Supreme Court precedent").

Since *Alappat*, the Federal Circuit has continued its expansion of patentable subject matter through the implementation of its formalistic approach. *State St. Bank & Trust Co. v. Signature Fin. Group*, 149 F.3d 1368 (Fed. Cir. 1998) (holding that anything with a "practical utility" is patentable subject matter); *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352 (Fed. Cir. 1999). The effect of this expansion has been to eliminate the *Benson-Flook-Diehr*

limitation on patentable subject matter, because any semi-competent patent drafter can easily craft claims that have some structure or a "practical utility" that nonetheless preempt the use of a law of nature, abstract idea or natural phenomenon. The Federal Circuit believes such claims are patentable subject matter. This Court's precedent mandates that they are not.

In this case, the practical effect of claim 13 is to preclude the use of a law of nature, namely the natural correlation in mammalian physiology between elevated levels of total homocysteine and certain vitamin B deficiencies.[2] This is because, although the claim contains another element, an "assaying" step, that element is so general and broad that it has no practical limiting effect. Anyone performing the "correlating" step must, in some way, assay body fluid for an elevated total homocysteine level. Thus, under this Court's precedent, claim 13 is not patentable subject matter. In contrast, under the Federal Circuit's formalistic approach that anything with some structure or a "practical utility" is patent eligible, claim 13 would be patentable subject matter, as detecting vitamin B deficiencies is surely a "practical utility."

---

[2] Indeed, the application originally was more direct in its claim to the law of mammalian physiology concerning the homocysteine-cobalamin/folate relationship. During the application process the applicant expressly told the examiner that "[a]s applicants are the first to detect cobalamin or folate deficiency by assaying body fluids for total homocysteine, it is believed that they are entitled to a claim of equivalent scope, not limited to any particular steps or methods." Pet. App. 9a.

II. IN ORDER TO PROMOTE THE PATENT SYSTEM'S GOAL OF DISCLOSURE, A CLAIM THAT EFFECTIVELY COVERS ALL USES OF A LAW OF NATURE OR ABSTRACT IDEA SHOULD BE INELIGIBLE FOR PATENT PROTECTION.

Both patent and copyright laws are constitutionally bound "[t]o Promote Progress in Science and the Useful Arts." Patent law does this by providing (i) an incentive for the *achievement* of technological advances, (ii) an incentive for the commercialization of those advances, and (iii) an incentive for the *disclosure* of advances that are achieved. In the absence of the patent system, many inventions would be protected by trade secrecy, interfering with norms of science that favor prompt disclosure of new information, particularly new discoveries in basic science. As this Court said in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327 (1945):

> The primary purpose of our patent system is not reward of the individual but the advancement of the arts and sciences. Its inducement is directed to disclosure of advances in knowledge which will be beneficial to society; it is not a certificate of merit, but an incentive to disclosure.

Id. at 330-331 (citations removed). Similarly, in *Markman v. Westview Instruments, Inc.*, this Court emphasized that disclosure must occur not simply because "the limits of the patent must be known" to third parties, but also for "the encouragement of the inventive genius of others." 517 U.S. 370, 390 (1996). *See also Universal Oil Products Co. v. Globe Oil & Refining Co.*, 322 U.S. 471, 484 (1944); Rebecca Eisenberg, *Patents and the Progress of Science*, 56 U. CHI L. REV. 1017, 1028 (1989) (concluding that the patent

system "facilitates disclosure by creating rights in inventions that survive disclosure"); Justin Hughes, *The Philosophy of Intellectual Property*, 77 Geo. L. J. 287, 316 (1988) (patent rights coupled with disclosure leads to expansion of the "commons" of ideas).

But such disclosure will do little or nothing to promote further progress – there will be no "encouragement of the inventive genius of others" – unless subsequent researchers are allowed to use the basic scientific teachings and discoveries disclosed in the patent. That those basic scientific teachings and discoveries remain unprotected is not just happenstance. There can be no "inventing around" a patent unless the patent discloses the basic scientific principles upon which the invention relies – those principles being broader than the invention claimed in the patent. This is the principal way by which "patent disclosure advances the 'Progress of . . . useful Arts' by permitting societal resources to be put to their best use in advancing more quickly beyond the patentee's contribution." Katherine Strandburg, *What Does the Public Get?: Experimental Use and the Patent Bargain*, 2004 Wisc. L. Rev. 81, 112 (2004).

To promote continuing progress in science and the useful arts, both patent and copyright delineate what may be protected ***and*** what may ***not*** be protected. In copyright, ideas and facts are unprotectable subject matter – things that may not be "propertized." *Feist Publications, Inc. v. Rural Telephone Service*, 499 U.S. 340 (1991) (facts are not copyrightable); *Harper & Row, Publishers, Inc. v. Nation Enterprises*, 471 U.S. 539, 547 (1985) ("no author may copyright facts or ideas"); *Baker v. Selden*, 101 U.S. 99 (1879) (methods cannot be copyrighted).

As discussed in Part I, this Court's patent precedent has made it clear that scientific truths, laws of nature, natural phenomena, and abstract ideas are unprotectable subject matter. *Rubber Tip Pencil Company v. Howard*, 87 U.S. 498, 507 (1874) ("an idea of itself is not patentable"); *Mackay Radio & Tel. Co. v. Radio Corp. of America*, 306 U.S. 86, 94 (1939) ("a scientific truth, or the mathematical expression of it, is not patentable invention"); *Benson*, 409 U.S. at 67; *Flook*, 437 U.S. at 589; *Diehr*, 450 U.S. at 185 (stating that laws of nature, natural phenomena, and abstract ideas are excluded from patent protection). In both copyright and patent law, these realms of unprotectable subject matter have been established by courts, not Congress[3] – a point that, as discussed in Part I, the Federal Circuit overlooked in *In re Alappat*.

In copyright law, the merger doctrine is an important mechanism for drawing the line between what can and cannot be propertized. "[G]iven the dilemma either of protecting original expression . . . when that protection can be leveraged to grant an effective monopoly over the idea thus expressed, or of making the idea free to all with the concomitant result that the plaintiff loses effective copyright protection . . . copyright chooses the latter course." Melville B. Nimmer & David Nimmer, NIMMER ON COPYRIGHT § 13.03[B][3] at 13-79 (2005); *Veeck v. Southern*

---

[3] While the bar of copyright on "ideas" was codified in 1976 at 17 U.S.C. § 102(b), that section is silent on copyright not extending to "facts." Yet this Court in *Feist* was crystal clear that "facts are not copyrightable" remains a "well-established proposition," 499 U.S. at 344, just as this Court has consistently held that "[e]xcluded from such patent protection are laws of nature, natural phenomena, and abstract ideas," *Diamond v. Diehr*, 450 U.S. at 185, despite silence on this point in the Patent Act.

Bldg. Code Cong. Int'l Inc., 293 F.3d 791 (5th Cir. 2002) (*en banc*), *cert. denied,* 539 U.S. 969 (2003) (where privately created model building code became binding municipal code, expression and the "fact" of municipal law "merged" and code may be freely copied); *Kern River Gas Transmission Co. v. Coastal Corp.*, 899 F.2d 1458 (5th Cir.), *cert. denied*, 498 U.S. 952 (1990) (expression of map showing location of pipeline and actual location of pipeline "merged" so that map was unprotected); *Morrissey v. Proctor & Gamble Co.*, 379 F.2d 675, 678 (1st Cir. 1967) (idea of particular kinds of sweepstakes and expression of sweepstakes rules merged where copyrighting expression "could exhaust all possibilities of future use of the substance").

This Court first enunciated the basic notion of the merger doctrine in *Baker v. Selden*, *supra,* concerning the scope of exclusive rights granted to the author of a copyrighted book "exhibit[ing] and explain[ing] a peculiar system of book-keeping." 101 U.S. at 100. This Court concluded that the exclusive rights of copyright extended only to expression itself and not to the teachings of the accounting method. In his opinion for this Court, Justice Bradley noted that protectable expression – the diagrams – would be, to some degree, dedicated to the public if those diagrams were necessary for practice of the uncopyrighted ideas:

> [a]nd where the art [the book] teaches cannot be used without employing the methods and diagrams used to illustrate the book, or such as are similar to them, such methods and diagrams are to be considered as necessary incidents to the art, and given therewith to the public.

Id. at 103. If the diagrams – a form of expression – and the unprotected accounting method "merge," then no copyright over the diagrams will prevent an individual from using the accounting method, even if that means they reproduce the diagrams in their own calculations.

In *Herbert Rosenthal Jewelry Corp. v. Kalpakian*, 448 F.2d 738 (9th Cir. 1971), the Ninth Circuit found that the defendant could not be liable for infringement of the plaintiff's copyright in a jewelry pin in the shape of a bee because the bee-shaped pin was quite life-like and, therefore, any other life-like bee pins would be "substantially similar" in expression to the plaintiff's jewelry. The court denied relief to the plaintiff succinctly stating the merger doctrine:

> When the "idea" and its "expression" are thus inseparable, copying the "expression" will not be barred, since protecting the "expression" in such circumstances would confer a monopoly of the "idea" upon the copyright owner free of the conditions and limitations imposed by the patent law.

Id. at 742. Of course, one of those fundamental "limitations imposed by the patent law" is that the exclusive rights of patent law do not extend to laws of nature – the issue in this case being that claim 13 would seal off a law of nature in that observing any instantiation of the general law of nature would violate the patent.

This Court has consistently recognized "the historic kinship between patent law and copyright law." *Sony v. Universal City Studios*, 464 U.S. 417, 439 (1984). *See also Fox Film Corp. v. Doyal*, 286 U.S. 123, 131 (1932) (concerning Court's determinations of tax treatment of royalties, "what we have said as to the purposes of the

Government in relation to copyrights applies as well, *mutatis mutandis*, to patents which are granted under the same constitutional authority to promote the progress of science and useful arts"). In both *Sony* and last Term's *Grokster* decision, this Court looked to patent law for development of rules of third party liability in copyright law. *MGM Studios Inc. v. Grokster, Ltd.*, 125 S. Ct. 2764, 2779 (2005) (drawing further parallel between third party liability in patent and copyright law).

While patent law draws a different line between what can be protected and what cannot be protected, it is nonetheless appropriate to look to copyright's merger doctrine as a model of how to resolve situations where a patent claim is arguably within patentable subject matter but would nonetheless *unquestionably* "exhaust all possibilities of future use of the substance" of the disclosure – in this case, a basic law of mammalian physiology. *Morrissey*, 379 F.2d at 678. To paraphrase *Herbert Rosenthal*, when the claimed patentable "process" and the underlying "law of nature" are inseparable, use of the "process" should not be barred, since protecting the "process" in such circumstances would confer a monopoly on the "law of nature" – violating a basic tenet of patent law. *See also* Eileen M. Kane, *Splitting the Gene: DNA Patents and the Genetic Code*, 71 Tenn. L. Rev. 707, 753-754 (2004) (proposing that patent claims which preempt laws of nature be limited, when necessary, "with the use of the merger doctrine from copyright law").

In this particular case, upholding claim 13 would, in effect, prevent the patent from generating or communicating *any* information that could help other would-be inventors because *every* inference about homocysteine – cobalamin/folate correlation would infringe the claim. If

claim 13 is upheld – and has the scope set out by the Federal Circuit – the principal disclosure in the patent – use of a basic law of mammalian physiology – will be preempted. Indeed, this is just the sort of problem presaged by *Benson*, where this Court said that otherwise patentable subject matter is not eligible for a patent if the "practical effect" of the patent would cover a law of nature. 409 U.S. at 71-72. *Benson*'s "practical effect" test to bar patenting of what would otherwise appear to be patentable subject matter is, in effect, an inchoate patent law version of copyright law's merger doctrine.

Further, LabCorp's inducement liability was based on distributing informational materials that "state[d] that elevated total homocysteine correlates to cobalamin/folate deficiency." Pet. App. 15a and again at 16a. In other words, LabCorp's liability was based on *disclosing* the law of nature that is *disclosed* in the patent. LabCorp's publications stated a law of nature: "that elevated homocysteine correlates to cobalamin/folate deficiency," Pet. App. 15a, which is no different than information freely available from the National Institutes of Health ("NIH"). The NIH website describes the basic teaching of claim 13 in its own descriptions of the relationship of homocysteine and folate or cobalamin deficiency as follows:

> "An elevated level of homocysteine in the blood, a risk factor for cardiovascular disease, also can result from folate deficiency."
>
> "A deficiency of folate, vitamin B_{12} or vitamin B_6 may increase blood levels of homocysteine, and folate supplementation has been shown to decrease homocysteine levels and to improve endothelial function."

National Institutes of Health, Office of Dietary Supplements, http://ods.od.nih.gov/factsheets/folate.asp, last visited December 23, 2005. One can find similar information in all types of medical literature, which unquestionably should not be held in any way to violate private patent rights.[4] Although inducement liability can properly attach to the distribution of physical materials in addition to information, punishing the dissemination of information alone through inducement liability would negate patent law's own goal of disclosure. In fact, to do so would result in the USPTO itself being an indirect infringer of all the patents it issues.

III. PATENT CLAIM CONSTRUCTIONS THAT RESTRICT COMMUNICATION REGARDING ABSTRACT IDEAS OR LAWS OF NATURE ARE CONTRARY TO THE FIRST AMENDMENT.

This Court has long held that communication enjoys First Amendment protection unless it falls within certain narrow categories of expression that are of "such slight social value that any benefit that may be derived from them is clearly outweighed by the social interest in order and morality." *Chaplinsky v. New Hampshire*, 315 U.S. 568, 572 (1942). It is difficult to dispute that communication of scientific ideas and facts has significant social value. *Compare Miller v. California*, 413 U.S. 15, 24 (1973) (noting that the definition of obscenity will not apply to

---

[4] *See, e.g.* Folic Acid Deficiency, eMedicine, http://www.emedicine.com/med/topic802.htm, last visited December 23, 2005 ("the significance of folic acid deficiency is compounded further by the following attributes: • An association of folate deficiency with elevated homocysteine, leading to increased arteriosclerosis risks").

expressive material if it has serious "scientific value"). Accordingly, lower courts have identified as black letter law the principle that "the First Amendment protects scientific expression and debate just as it protects political and artistic expression." *Universal City Studios, Inc. v. Corley*, 273 F.2d 429, 446-47 (2nd Cir. 2001).

In this case, the Federal Circuit found direct infringement of claim 13 based "*solely* on whether the physicians perform the correlating step." Pet. App. 13a (emphasis added). The Federal Circuit's decision could thus be taken to construe as an infringer any person who discussed the relationship between elevated homocysteine and deficiencies in B vitamins. At a minimum, it would appear that a person who discussed the correlation after looking at an elevated homocysteine level in a particular assay (which they performed or was performed on their behalf) would infringe. This finding of infringement for a purely speech based activity seems contrary to First Amendment principles.

In the copyright context, this Court has mediated tension with the First Amendment through the idea/expression dichotomy, which "strike[s] a definitional balance between the First Amendment and the Copyright Act by permitting free communication of facts while still protecting the author's expression." *Eldred v. Ashcroft*, 537 U.S. 186, 220 (2003) (citing *Harper & Row*, 471 U.S. at 556). The *Eldred* Court further noted that "[d]ue to this distinction, every idea, theory, and fact in a copyrighted work becomes instantly available for public exploitation at the moment of publication." *Id.*

As discussed in Part II, patent law has no explicit counterpart to copyright law's idea/expression dichotomy

and its associated doctrine of merger. However, this Court's longstanding exclusion of laws of nature and abstract ideas from patentable subject matter has played a somewhat parallel function. Were laws of nature and abstract ideas to be patentable subject matter, scientific expression could be seriously restricted in violation of the First Amendment. Thus, when addressing the issue of patentable subject matter, which is but one area of increasing tension between patent law and the First Amendment, it is important to be mindful of the consequence such decisions will have on the Freedom of Speech.

CONCLUSION

For the foregoing reasons, this Court should uphold its limitations on patentable subject matter and remand this case for further examination of the patent in light of the bar on patenting laws of nature, scientific truths, and abstract ideas.

Respectfully submitted,

DANIEL B. RAVICHER
Executive Director
PUBLIC PATENT FOUNDATION, INC.
1375 Broadway, Suite 600
New York, New York 10018
(212) 796-0570

PROFESSOR JUSTIN HUGHES
Counsel of Record
Benjamin N. Cardozo
School of Law
55 Fifth Avenue
New York, New York 10003

Counsel for Amicus Curiae

December 23, 2005